

Amendments to the Claims

This listing of claims will replace all prior versions and listings of the claims in the application.

1. (Currently Amended) A method of producing a ~~high-pressure~~ gas under pressure, comprising:

providing a container;

supplying the container with a liquid; and increasing the pressure of the liquid within the container;

supplying a reactant composition to the liquid under pressure in the container and which chemically reacts with the liquid to produce a resulting ~~high-pressure~~ gas under pressure; and

drawing the ~~resulting high-pressure~~ gas under pressure from the container.

2. (Currently Amended) A method as claimed in claim 1, and wherein ~~the step of~~ supplying the reactant compound further comprises supplying a chemical hydride which chemically reacts with the liquid to produce a ~~resulting high-pressure~~ hydrogen gas.

3. (Currently Amended) A method as claimed in claim 1, and wherein ~~before the step of~~ supplying the reactant composition to the liquid under pressure, the method further comprises:

enclosing a reactant composition in a frangible enclosure; and

releasing the reactant composition from the frangible enclosure before the reactant compound is supplied to the container.

4. (Currently Amended) A method as claimed in claim 3, and wherein after ~~the step of~~ enclosing the reactant composition, and before the step of releasing the reactant composition, the method further comprises:

providing a an inert fluid stream which is disposed in fluid flowing communication with the container and which receives and moves the frangible enclosure along a course of travel; and

providing an assembly along the course of travel which fractures the enclosure to release the reactant composition therefrom.

5. (Currently Amended) A method as claimed in claim 1, and wherein before ~~the step of~~ supplying the reactant composition, the method further comprises:

providing a substantially continuous conveyor coupled in selective fluid flowing relation relative to the container, and wherein the continuous conveyor moves the reactant compound along a course of travel and into the container.

6. (Previously Presented) A method as claimed in claim 5, and wherein the continuous conveyor comprises an auger.

7. (Currently Amended) A method as claimed in claim 5, and wherein ~~before the step of~~ providing the continuous conveyor, the method further comprises:

mixing the reactant compound with an inert fluid and delivering the mixture of the reactant compound and the inert fluid to the continuous conveyor.

8. (Previously Presented) A method as claimed in claim 1, and wherein the liquid pressure is greater than about 100 pounds per square inch.

9. (Previously Presented) A method as claimed in claim 1, and wherein the chemical reaction of the reactant composition with the liquid in the container reactively consumes the liquid, and wherein the method further comprises:

releasing the liquid pressure of the container; and

replacing the liquid which has chemically reacted with the reactant compound.

10. (Currently Amended) A method of producing a ~~high-pressure~~ gas under pressure, comprising:

providing a container which is operable to enclose a first liquid under pressure;

supplying a source of a first liquid which is received and enclosed by the container; ~~and~~ and

increasing the pressure of first liquid enclosed within the container;

rendering a reactant composition substantially chemically non-reactive;

combining the substantially non-reactive reactant composition with a second fluid stream

~~and~~;

coupling the second fluid stream in fluid flowing relation relative to the container;

supplying the reactant compound to the container in a manner which causes the previously non-reactive composition to chemically react with the first liquid in the container to produce ~~high pressure~~ hydrogen gas under pressure; and

drawing the ~~high-pressure~~ hydrogen gas from the container.

11. (Currently Amended) A method as claimed in claim 10, and wherein ~~the step of~~ supplying a source of a first liquid which is received and enclosed by the container, and increasing the pressure of the first liquid enclosed within the container further comprises:

providing a charging pump which is coupled in fluid flowing relation relative to the container and which is operable to simultaneously supply and increase the pressure of the first liquid within the container.

12. (Previously Presented) A method as claimed in claim 11, and wherein the charging pump increases the first liquid pressure to greater than about 100 pounds per square inch.

13. (Currently Amended) A method as claimed in claim 10, and wherein ~~the step of~~ rendering a reactant composition substantially chemically non-reactive further comprises:

enclosing the reactant composition in a frangible substantially chemically non-reactive enclosure.

14. (Currently Amended) A method as claimed in claim 10, and wherein ~~the step of~~ rendering a reactant composition substantially non-reactive further comprises:

mixing the reactant composition with a substantially inert fluid.

15. (Currently Amended) A method as claimed in claim 10, and wherein ~~the step of~~ coupling the second fluid stream in fluid flowing relation to the container further comprises:

providing a valve which is operable to selectively remove a portion of the second fluid stream, substantially isolate the portion of the second fluid stream from the remaining fluid stream, and deliver the isolated portion of the second fluid stream to the container.

16. (Currently Amended) A method as claimed in claim 13, and wherein ~~the step of~~ supplying the reactant composition to the container further comprises:

providing an assembly which fractures the enclosure to release the reactant composition therefrom.

17. (Previously Presented) A method as claimed in claim 10, and wherein the reactant composition is a metal or metal hydride which reacts with the first fluid to produce hydrogen gas and other byproducts, and wherein the first fluid is consumed in the chemical reaction, and wherein the method further comprises:

replacing the first fluid consumed in the chemical reaction.

18. (Currently Amended) A method of producing a ~~high-pressure~~ gas under pressure, comprising:

providing a container having a volume;

supplying a source of water to the container and substantially filling the volume thereof; and

increasing the pressure of the water in the container;

coupling a fluid stream in fluid flowing relation relative to the container;

supplying a source of a metal or metal hydride to the fluid stream;
metering the fluid stream carrying the source of metal or metal hydride to the container;
reacting the metal or metal hydride with the water which is under pressure to generate ~~high~~
~~pressure~~ hydrogen gas having a pressure and other byproducts;
drawing the ~~high-pressure~~ hydrogen gas under pressure from the container and supplying it as
a fuel;
depleting the water in the container by chemically reacting the water with the metal or metal
hydride;
releasing the pressure exerted by the water from the container; and
removing the byproducts produced by the chemical reaction of the metal or metal hydride
with the water, and replenishing the supply of water.

19. (Currently Amended) A method as claimed in claim 18, and wherein ~~the step of~~
supplying the source of metal or metal hydride further comprises:

enclosing the source of the metal or metal hydride into a plurality of frangible enclosures, and
wherein the fluid stream carries the individual frangible enclosures.

20. (Previously Presented) A method as claimed in claim 19, and further
comprising:

an assembly for fracturing the individual frangible enclosures to reactively expose the metal
or metal hydride to the water which is under pressure.

21. (Currently Amended) A method as claimed in claim 18, and wherein the fluid stream

is inert, and wherein the step of supplying the source of the metal or metal hydride to the container
further comprises:

mixing the source of the metal or metal hydride with a the substantially inert ~~carrier~~ fluid
stream, and wherein the mixture of the metal or metal hydride and the ~~carrier~~ inert fluid stream are
supplied to the container.

22. (Currently Amended) A method as claimed in claim 18, and wherein ~~the step of~~
metering the fluid stream further comprises:

removing a portion of the fluid stream;

isolating the portion of the fluid stream from the remaining fluid stream; and

delivering the isolated portion of the fluid stream to the container.